

**AUG 11 2005**

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## **510(k) Summary**

This 510(k) summary for OrthoMend is being submitted in accordance with the requirements of 21 CFR 807.92.

### **Submitted by**

TEI Biosciences Inc.  
7 Elkins Street  
Boston, MA 02127  
(617) 268-1616  
(617) 268-3282 (fax)

### **Contact Person**

Kenneth James, Ph.D.  
Senior Director of Product and Clinical Sciences

### **Date Prepared**

June 29, 2005

### **Device Information**

Proprietary name: OrthoMend  
Classification name: mesh, surgical, polymeric  
Device classification: Class II (21CFR878.3300)

### **Device Description**

OrthoMend is a remodelable collagen matrix used to reinforce soft tissues where weakness exists. The device is supplied sterile and is provided in sheet form in a variety of sizes to be trimmed and sutured by the surgeon to meet the individual patient's needs.

### **Intended Use**

OrthoMend Soft Tissue Repair Matrix is intended for reinforcement of soft tissues repaired by sutures or suture anchors, during tendon repair surgery, including reinforcement of the rotator cuff, patellar, Achilles, biceps, quadriceps, or other tendons.

OrthoMend Soft Tissue Repair Matrix is not intended to replace normal body structure or provide the full mechanical strength to support tendon repair of the rotator cuff, patellar, Achilles, biceps, quadriceps or other tendons. Sutures used to repair the tear and sutures or bone anchors used to attach the tissue to the bone provide biomechanical strength for the tendon repair. OrthoMend Soft Tissue Repair Matrix reinforces soft tissue and provides a remodelable scaffold that is replaced by the patient's own soft tissues.

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**TEI BIOSCIENCES INC.**  
June 29, 2005

**OrthoMend™**  
Abbreviated 510(k) Premarket Notification

**Legally Marketed Devices to which Equivalence is Being Claimed**  
OrthoMend is substantially equivalent in function and intended use to:

Predicate Devices	Manufacturer	510(k) Number
OrthoMend	TEI Biosciences, Boston, MA	K031188
CuffPatch Surgical Mesh	Organogenesis, Canton, MA	K042809
Fortaflex Surgical Mesh (CuffPatch)	Organogenesis, Canton, MA	K020049

**Summary of Technological Characteristics and Biocompatibility**

OrthoMend is substantially equivalent to other surgical meshes with respect to its design as a thin, flexible, polymeric sheet which can be sutured to surrounding tissues to secure it in place. In addition, the device is fully resorbable over a period of months.

A rigorous biocompatibility assessment performed by an independent certified laboratory demonstrated the biocompatibility of OrthoMend. The tests performed included: cytotoxicity, sensitization, intracutaneous reactivity, acute systemic toxicity, genotoxicity, intramuscular toxicity, hemolysis, and pyrogenicity. The manufacturing methods for OrthoMend were also tested by an independent laboratory to assure safe levels of viral inactivation.



AUG 11 2005

Food and Drug Administration  
9200 Corporate Boulevard  
Rockville MD 20850

Kenneth James, Ph.D.  
Sr. Director of Product and Clinical Sciences  
TEI Biosciences Inc.  
7 Elkins Street  
Boston, Massachusetts 02127

Re: K051766  
Trade/Device Name: OrthoMend Soft Tissue Repair Matrix  
Regulation Number: 21 CFR 878.3300  
Regulation Name: Surgical mesh  
Regulatory Class: II  
Product Code: FTL  
Dated: June 29, 2005  
Received: June 30, 2005

Dear Dr. James:

We have reviewed your Section 510(k) premarket notification of intent to market the device referenced above and have determined the device is substantially equivalent (for the indications for use stated in the enclosure) to legally marketed predicate devices marketed in interstate commerce prior to May 28, 1976, the enactment date of the Medical Device Amendments, or to devices that have been reclassified in accordance with the provisions of the Federal Food, Drug, and Cosmetic Act (Act) that do not require approval of a premarket approval application (PMA). You may, therefore, market the device, subject to the general controls provisions of the Act. The general controls provisions of the Act include requirements for annual registration, listing of devices, good manufacturing practice, labeling, and prohibitions against misbranding and adulteration.

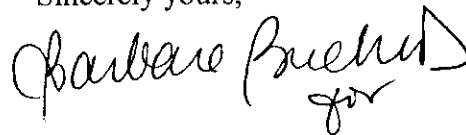
If your device is classified (see above) into either class II (Special Controls) or class III (PMA), it may be subject to such additional controls. Existing major regulations affecting your device can be found in the Code of Federal Regulations, Title 21, Parts 800 to 898. In addition, FDA may publish further announcements concerning your device in the Federal Register.

Please be advised that FDA's issuance of a substantial equivalence determination does not mean that FDA has made a determination that your device complies with other requirements of the Act or any Federal statutes and regulations administered by other Federal agencies. You must comply with all the Act's requirements, including, but not limited to: registration and listing (21 CFR Part 807); labeling (21 CFR Part 801); good manufacturing practice requirements as set forth in the quality systems (QS) regulation (21 CFR Part 820); and if applicable, the electronic product radiation control provisions (Sections 531-542 of the Act); 21 CFR 1000-1050.

This letter will allow you to begin marketing your device as described in your Section 510(k) premarket notification. The FDA finding of substantial equivalence of your device to a legally marketed predicate device results in a classification for your device and thus, permits your device to proceed to the market.

If you desire specific advice for your device on our labeling regulation (21 CFR Part 801), please contact the Office of Compliance at (240) 276-0115. Also, please note the regulation entitled, "Misbranding by reference to premarket notification" (21CFR Part 807.97). You may obtain other general information on your responsibilities under the Act from the Division of Small Manufacturers, International and Consumer Assistance at its toll-free number (800) 638-2041 or (301) 443-6597 or at its Internet address <http://www.fda.gov/cdrh/dsma/dsmamain.html>

Sincerely yours,

A handwritten signature in black ink, appearing to read "Mark N. Melkerson" with a stylized flourish at the end.

Mark N. Melkerson  
Acting Director  
Division of General, Restorative  
and Neurological Devices  
Office of Device Evaluation  
Center for Devices and  
Radiological Health

Enclosure

K051766

TEI BIOSCIENCES INC.  
June 29, 2005

OrthoMend™  
Abbreviated 510(k) Premarket Notification

## 2. Indications for Use

510(k) Number (if known):

Device Name: OrthoMend Soft Tissue Repair Matrix

### Indications For Use:

OrthoMend Soft Tissue Repair Matrix is intended for reinforcement of soft tissues repaired by sutures or suture anchors, during tendon repair surgery, including reinforcement of the rotator cuff, patellar, Achilles, biceps, quadriceps, or other tendons.

OrthoMend Soft Tissue Repair Matrix is not intended to replace normal body structure or provide the full mechanical strength to support tendon repair of the rotator cuff, patellar, Achilles, biceps, quadriceps or other tendons. Sutures used to repair the tear and sutures or bone anchors used to attach the tissue to the bone provide biomechanical strength for the tendon repair. OrthoMend Soft Tissue Repair Matrix reinforces soft tissue and provides a remodelable scaffold that is replaced by the patient's own soft tissues.

Prescription Use   X    
(Part 21 CFR 801 Subpart D)

AND/OR

Over-The-Counter Use \_\_\_\_\_  
(21 CFR 801 Subpart C)

(PLEASE DO NOT WRITE BELOW THIS LINE-CONTINUE ON ANOTHER PAGE  
IF NEEDED)

Concurrence of CDRH, Office of Device Evaluation (ODE)

*Barbara Freund*  
(Division Sign-Off) *for Melherson*  
Division of General, Restorative  
and Neurological Devices

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